## OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT

**FACILITIES DEVELOPMENT DIVISION** 1600 9th Street, Room 420 Sacramento, California 95814 (916) 654-3362 FAX (916) 654-2973



March 3, 2000

## OSHPD/FDD PRE-APPROVAL OF FIXED HOSPITAL EQUIPMENT ANCHORAGES

Fixed equipment; as defined by the California Building Code, Title 24, Part 2; shall not be installed in any OSHPD 1 or OSHPD 2 facilities unless the anchorage of such equipment is approved by the Office of Statewide Health Planning and Development (the Office). OSHPD 1 and OSHPD 2 facilities are defined in the 1998 CBC, Title 24, Part 2, Section 101.17.13. Such anchorage approval for a particular item of equipment may be obtained for each project that uses that item. Alternatively, the anchorage of a particular item of equipment may be pre-approved by the Office. That Pre-Approval can then be used on all future projects that use the pre-approved equipment, provided that the equipment is installed in accordance with the pre-approved documents. The Office's Pre-approval Program is explained below.

- 1. The Office's Pre-approval Program is a process which permits the manufacturers, designers or suppliers of fixed equipment to submit anchorage details for review and approval although the equipment is not associated with a specific project.
  - For equipment that has been pre-approved, it is not always necessary to show anchorage details on the plans. A reference on the Plans to the Pre-Approval number is all that is necessary in many cases. Supplementary details and calculations are required for any portion of the anchorage that is not part of the pre-approved documents.
- 2. Applicants wishing to have their hospital equipment anchorage pre-approved shall file an application for approval of anchorage for fixed hospital equipment. The following supplementary documentation shall accompany the application:
  - a) A non-refundable deposit of \$250.00 payable to the State of California.
  - b) Two (2) copies of sufficient data for evaluation of support and anchorage in accordance with California Code of Regulations, Title 24, Part 2, and Title 24, Part 1, Chapter 7. Data submitted may include drawings, specifications, structural calculations, test data or any other information that may be helpful in the evaluation of the pre-approval.

The plans must be signed by a California registered structural, civil or mechanical engineer. However, if the plans go beyond anchorage and include building structure, a structural engineer must sign them. The plans must clearly identify all the equipment for which the pre-approval is applicable. All anchorage must be clearly detailed. If a piece of equipment connects to a frame, this frame will be considered a part of the anchorage and must be clearly detailed and analyzed

if it is to be included in the pre-approval. The structure to which the equipment is attached can, in some cases, be made a part of the pre-approval. However, this is not a requirement.

Leave a blank space on each drawing for the Office's Pre-Approval stamp, preferably in the same location on all drawings. The blank space should be at least two and one quarter (2-1/4) inches high by three and one quarter (3-1/4) inches wide. Please do not draw a box around the blank space as it interferes with the border of OSHPD's approval stamp. If the Pre-Approval contains more than one sheet of drawings, number the sheets consecutively and include an index.

If the equipment or anchorage is to be substantiated by tests, an independent California registered structural, civil or mechanical engineer must conduct such tests. A test procedure should be submitted to the Office for review prior to testing in order to avoid retesting. The minimum loading is 1.5 times the dead load plus two (2) times the applicable live load, plus two (2) times the applicable lateral load. In some instances, for example storage racks, the equipment itself and not merely the anchorage, must be designed for lateral loads. In these cases when testing the anchorage, two (2) times the lateral load must be used. However, if the testing is limited to the equipment assembly the seismic lateral load may be divided by 1.33. For vibration isolators the seismic lateral load must be used when testing the isolator assembly, but the full lateral load must be used when testing the anchorage of the isolator to the structure. The test procedure must include the duration of load application and the failure criteria.

When performing the calculations or determining the test loads, comply with all the Footnotes of Table 16B-O, Title 24, Part 2, the '98 California Building Code.

3. When documents are received for a pre-approval, they will be given a preliminary review. OSHPD will acknowledge their receipt and the applicant will be informed in writing of any additional data required for review. Before the documents are fully reviewed, the Applicant will be provided with an estimate of the total review fee based upon costs to be incurred for review.

The applicant must then notify the Office in writing if he/ she wishes to proceed with the process. Such notification shall be accompanied by payment of the estimated fee. No further review will be made before the receipt of the applicant's notification and payment of the estimated fee. If during review it appears that the actual costs will exceed the estimate by more than 10%, the applicant will be informed. Additional fees not to exceed the actual cost will be due and payable immediately upon completion of review. The pre-approved anchorage drawings will not be stamped approved and will not become effective until all fees are paid.

4. The Office will compile a list of pre-approval titles and names of companies for which the anchorage details have been pre-approved. The list will be made available on the following website:

## http://www.oshpd.state.ca.us/fdd/Resources/resources.htm

- 5. In some cases, the preapproved drawing must show details of the equipment itself. For instance, if an anchorage angle is to be attached to the side of a metal chassis, the gage and material of the chassis must be shown. Or, if a piece of equipment has a base plate that is to be anchored to a concrete slab with expansion anchors, the drawings must show the base plate's material and thickness and the diameter of the bolt holes in the plate. If the plate is to be elevated above the slab for leveling, then the maximum allowable gap between the plate and the slab must be shown on the drawings.
- 6. The equipment must be installed in strict accordance with the pre-approved anchorage drawings. It will be the responsibility of the applicant to deliver a copy of these drawings to the job site.
- 7. The approvals must be renewed every three (3) years for a nonrefundable fee of one hundred fifty dollars (\$150.00) or whenever applicable regulations or the design or methods of installation of the anchorage of equipment related thereto has been changed or altered. Additional review fees will be based upon the actual costs incurred.